

***CITY OF WARWICK, RHODE ISLAND FIREFIGHTERS / POLICE I  
PENSION FUND***  
**ACTUARIAL VALUATION AS OF JULY 1, 2011**

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## DISCUSSION

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## **I. Purpose and Summary**

This report presents the results of our July 1, 2011 actuarial valuation of the City of Warwick, Rhode Island Firefighters/Police I Pension Fund. The valuation was performed at the request of the City of Warwick to determine the City's annual contribution for the fiscal years beginning July 1, 2012 and July 1, 2013 under the City's funding ordinance.

The City's contribution levels are \$14,276,545 for 2012-2013 and \$14,811,916 for 2013-2014, as shown on Table 4.

The development of the valuation results is shown in Tables 1 through 8 and is described in more detail on the following pages.

## **II. Membership Data**

The City furnished data for active and retired members as of December 31, 2010. The data was projected to July 1, 2011 for valuation purposes reflecting age, salary and benefit increases, but assuming no change in the number of members. Although we did not audit this data, we did review it for reasonableness and consistency with the data collected in the previous valuation (prepared as of July 1, 2009). Tables 5A, 5B and 5C provide distributions by age and service for active members. Tables 1A, 1B, and 1C provide information about the retirees and inactive members.

## **III. Plan Provisions**

A summary of the principal plan provisions recognized for purposes of the valuation is provided in Table 8. There were no changes to this plan adopted since the last actuarial valuation.

#### **IV. Assets**

The City of Warwick furnished audited financial statements for the fiscal years ending June 30, 2010 and 2011. Tables 3a, 3b, and 3c provide information about the composition of plan assets and the development of valuation assets.

The asset value used in the determination of the annual contribution level is set equal to the market value of assets, adjusted to phase in the difference between actual and expected investment return over five years, at 20% per year. As shown in Table 3c, the market value of assets on July 1, 2011 was \$69,242,529 while the valuation assets were \$69,580,218, or 100.5% of the market value.

As shown in Table 3b, the dollar-weighted rates of return on the market value of assets for FY 2010 and FY 2011 were 14.27% and 22.30%, respectively. These returns are net of all investment and administrative expenses.

#### **V. Actuarial Methods and Assumptions**

There were several changes to the assumptions and methods since the last actuarial valuation. Assumptions such as the annual investment return, mortality tables, payroll growth rate, and salary increase rates were modified based on an experience study presented in April 2011 and adopted by the Board for the Rhode Island Municipal Employees' Retirement System (MERS). Most significantly, the investment return assumption was decreased from 8.25% to 7.50%, and the mortality assumption was modified for continual future increases in life expectancy. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the City of Warwick, Rhode Island Firefighters/Police I Pension Fund.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.

## **VI. Funding Policy**

The plan is funded on an actuarially determined basis in accordance with the City's pension ordinances. Actuarial valuations are performed every two years. The annual City contribution is the sum of:

1. Normal cost, net of the 7.00% employee contributions;
2. A 40-year amortization of the unfunded actuarial accrued liability as of July 1, 1995, amortized as a level percentage of payroll (payments increase by 3.75% per year under the assumptions employed in this valuation); and
3. 20-year amortization of the experience gains or losses, method changes, assumption changes, or plan changes since July 1, 1995, amortized as a level percentage of payroll.

The contribution amount determined by the July 1, 2011 valuation is projected with assumed base pay increases (3.75%) to determine the statutory contribution level for the 2012-2013 and 2013-2014 fiscal years.

## **VII. GASB 27**

The contributions determined by this valuation were determined in accordance with the pension ordinances, but they do not comply with the requirements of Statement No. 27 of the Governmental Accounting Standards Board. That statement requires that governmental plans determine an Annual Required Contribution (ARC) using an amortization period not in excess of 30 years, and it requires that the amortization payments in a closed plan, such as this one, either be based on a level-payment approach or reflect the expected decrease in future payroll for the closed active group. The plan's contributions, determined in accordance with city ordinances which do utilize an increasing payroll assumption, do not comply with these requirements.

The ARCs as computed using a 30-year level payment amount, as required by GASB 27, are \$21,122,807 for 2012-2013 and \$21,173,419 for 2013-2014.

The plan's funded ratio—the actuarial value of assets divided by the actuarial accrued liability, is 22.3%, compared to 26.6% in the preceding valuation. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 27.

## **VII. Analysis of Changes**

The plan experienced an actuarial gain of \$3,471,328 over the last two years. In addition, the changes of Actuarial Assumptions added \$23,413,883 to the unfunded actuarial accrued liability, as well as increasing the amount of normal cost contribution.

The following shows a reconciliation of the actual FY 2012 contribution determined by the prior valuation and the FY 2013 contribution set by this valuation.

Contribution for FY 2010	\$ 13,503,973
Expected 4% increase	540,159
Decrease in the number of active members	(700,974)
Demographic and payroll changes	(899,630)
Actuarial assumption changes	1,195,615
Asset loss	<u>636,402</u>
Contribution set by current valuation for FY 2011	\$ 14,275,545

## **VIII. Future Expectations**

We feel it important to point out that due to the amortization policy, several large gains from 6-10 years ago are scheduled to be fully amortized before large losses from the past 12-20 years and therefore there are two large increases expected to the contribution levels in FY2021 and FY2023. It would be prudent for the City to begin thinking through solutions on how to lessen the impact on the future budgets, including accelerating the increases over the next few years. To assist with this planning, we will be providing more information to City Staff on the projected outlook of the Plan.

The undersigned are available to answer any questions in connection with this valuation of the plan or the information presented in this report.



Joseph P. Newton, FSA, EA, MAAA  
Senior Consultant  
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## **TABLES**

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## Valuation Results

### Combined FireFighters and Police I

	July 1, 2011	July 1, 2009
<b>A. Membership Data</b>		
1. Active members		
a. Number	65	88
b. Expected covered payroll	\$ 5,604,695	\$ 7,606,876
c. Average pay	\$ 86,226	\$ 86,442
d. Average attained age	49.4	48.6
e. Average past service	24.4	23.4
2. Retired members and beneficiaries		
a. Number	390	367
b. Average benefit	\$ 48,081	\$ 46,493
c. Average attained age	67.5	66.5
3. Inactive members		
a. Number	-	-
b. Refund	\$ -	\$ -
<b>B. Liabilities</b>		
1. Normal cost with interest		
a. Dollar amount	\$ 1,620,860	\$ 2,407,124
b. % of covered payroll	28.92%	31.64%
2. Actuarial accrued liability		
a. Active members	\$ 53,966,870	\$ 60,925,841
b. Retired members and beneficiaries	257,740,998	225,588,169
c. Inactive	-	-
d. Total	\$ 311,707,868	\$ 286,514,010
3. Valuation assets	\$ 69,580,218	\$ 76,142,283
4. Unfunded actuarial accrued liability [2(d) - (3)]	\$ 242,127,650	\$ 210,371,727

## Valuation Results

### Police I Only

	July 1, 2011	July 1, 2009
<b>A. Membership Data</b>		
1. Active members		
a. Number	1	1
b. Expected covered payroll	\$ 81,877	\$ 85,435
c. Average pay	\$ 81,877	\$ 85,435
d. Average attained age	68.1	66.1
e. Average past service	45.0	43.0
2. Retired members and beneficiaries		
a. Number	109	110
b. Average benefit	\$ 43,059	\$ 44,002
c. Average attained age	73.0	71.3
3. Inactive members		
a. Number	-	-
b. Refund	\$ -	\$ -
<b>B. Liabilities</b>		
1. Normal cost with interest		
a. Dollar amount	\$ -	\$ -
b. % of covered payroll	0.00%	0.00%
2. Actuarial accrued liability		
a. Active members	\$ 721,785	\$ 718,909
b. Retired members and beneficiaries	55,906,539	56,780,679
c. Total	<u>\$ 56,628,324</u>	<u>\$ 57,499,588</u>

## Valuation Results

### FireFighters Only

	July 1, 2011	July 1, 2009
<b>A. Membership Data</b>		
1. Active members		
a. Number	64	87
b. Expected covered payroll	\$ 5,522,817	\$ 7,521,441
c. Average pay	\$ 86,294	\$ 86,453
d. Average attained age	49.2	48.4
e. Average past service	24.0	23.2
2. Retired members and beneficiaries		
a. Number	281	257
b. Average benefit	\$ 50,030	\$ 47,560
c. Average attained age	65.4	64.5
3. Inactive members		
a. Number	-	-
b. Refund	\$ -	\$ -
<b>B. Liabilities</b>		
1. Normal cost with interest		
a. Dollar amount	\$ 1,620,860	\$ 2,407,124
b. % of covered payroll	29.35%	32.00%
2. Actuarial accrued liability		
a. Active members	\$ 53,245,085	\$ 60,206,932
b. Retired members and beneficiaries	201,834,459	168,807,490
c. Inactive	-	-
d. Total	\$ 255,079,544	\$ 229,014,422

**Summary of Amortization Bases**

<b>Date Established</b>	<b>Purpose</b>	<b>Initial Amount</b>	<b>Remaining Balance as of July 1, 2011</b>	<b>2011 - 2012 Amortization Payment *</b>	<b>Years Remaining as of July 1, 2011</b>
7/95	Fresh Start	\$ 171,797,132	\$ 246,086,026	\$ 15,519,398	24
7/97	Experience Gain	(14,572,581)	(9,649,919)	(1,818,986)	6
7/97	Assumption Change	(677,053)	(448,340)	(84,511)	6
7/99	Experience Gain	(25,005,961)	(19,689,434)	(2,879,934)	8
7/99	Assumption Change	603,797	475,425	69,539	8
7/01	Asset Method Change	(12,587,596)	(11,053,796)	(1,337,677)	10
7/01	Cost Method Change	(10,349,896)	(9,088,759)	(1,099,877)	10
7/01	Experience Loss	3,541,810	3,110,238	376,386	10
7/03	Plan Amendment	1,109,786	1,043,908	108,828	12
7/03	Asset Method Change	(9,775,343)	(9,195,083)	(958,591)	12
7/03	Experience Loss	19,740,007	18,568,246	1,935,746	12
7/05	Experience Loss	20,141,383	19,739,563	1,822,664	14
7/07	Experience Gain	(3,098,260)	(3,100,553)	(258,746)	16
7/09	Experience Gain	(4,583,232)	(4,612,425)	(353,257)	18
7/11	Experience Gain	(3,471,328)	(3,471,328)	(246,944)	20
7/11	Assumption Change	23,413,883	23,413,883	1,665,622	20
	Total		\$ 242,127,650	\$ 12,459,660	

\* Assuming payment made at the middle of the year.

**Asset Information**  
**Composition of Fund as of June 30, 2011**

	<b>Market Value</b>	<b>Percentage of Total</b>
1. Cash and equivalents	\$ (21,121)	0.0%
2. Equities, including index funds	38,612,469	55.8%
3. Fixed income investments	30,708,546	44.3%
4. Receivables less payables	<u>(57,365)</u>	<u>-0.1%</u>
5. Total	\$ 69,242,529	100.0%

**Asset Information**  
**Asset Reconciliation and Expected Returns**

	FY 2008	FY 2009	FY 2010	FY 2011
1. Beginning of year market value	81,435,768	74,819,376	57,914,821	61,290,094
2. Contributions				
a. City	12,774,751	12,620,739	13,125,568	12,984,595
b. Member	524,802	493,970	410,841	407,932
c. Total	<u>13,299,553</u>	<u>13,114,709</u>	<u>13,536,409</u>	<u>13,392,527</u>
3. Benefits paid	(16,628,480)	(17,787,184)	(18,099,152)	(18,532,731)
4. Net return	(3,287,465)	(12,232,080)	7,938,016	13,092,640
5. End of year market value	74,819,376	57,914,821	61,290,094	69,242,530
6. Net market return	-4.12%	-16.88%	14.27%	22.30%
7. Expected market value				
a. Beginning of year	81,435,768	74,819,376	57,914,821	61,290,094
b. Net cash flow	(3,328,927)	(4,672,475)	(4,562,743)	(5,140,204)
c. Earnings assumption	8.00%	8.00%	8.00%	8.00%
d. Expected earnings	6,381,704	5,798,651	4,450,676	4,697,599
e. Excess/(shortfall)	(9,669,169)	(18,030,731)	3,487,340	8,395,041

**Asset Information**  
**Development of Valuation Assets**

1.	Market value as of June 30, 2011			\$ 69,242,529
2.	Adjustment for investment gain/(loss) to be recognized:			
	<b>Period</b>	<b>Investment Gain/(Loss) Different than Expected</b>	<b>Gain/(Loss) Not Yet Recognized</b>	<b>Adjustment</b>
	07/01/10-06/30/11	\$ 8,395,041	80%	\$ 6,716,033
	07/01/09-06/30/10	3,487,340	60%	2,092,404
	07/01/08-06/30/09	(18,030,731)	40%	(7,212,292)
	07/01/07-06/30/08	(9,669,169)	20%	<u>(1,933,834)</u>
	Total			\$ (337,689)
3.	Valuation assets [(1) - (2)]			\$ 69,580,218
4.	Actuarial value as a percentage of market			100.5%

### Development of Contribution Levels

	Valuation Results 2011 - 2012	Statutory Contribution for	
		2012 - 2013	2013 - 2014
1. Gross normal cost	\$ 1,620,860		
2. Anticipated employee contributions	<u>(319,994)</u>		
3. Net normal cost [(1) - (2)]	\$ 1,300,866	\$ 1,349,648	\$ 1,400,260
4. Sum of amortization amounts	<u>12,459,660</u>	<u>12,926,897</u>	<u>13,411,656</u>
5. Total [(3) + (4)]	\$ 13,760,526	\$ 14,276,545	\$ 14,811,916



**Distribution of Active Members by Age and by Years of Service (Police I)  
As of July 1, 2011**

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
25-29	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
30-34	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
35-39	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
40-44	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
45-49	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
50-54	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
55-59	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
60-64	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
65 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$81,877	1 \$81,877
Total	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$81,877	1 \$81,877

**Distribution of Active Members by Age and by Years of Service (Fire I)**  
**As of July 1, 2011**

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
25-29	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
30-34	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
35-39	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
40-44	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$77,921	5 \$86,409	0 \$0	0 \$0	0 \$0	8 \$83,226
45-49	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$77,278	19 \$82,787	7 \$86,390	0 \$0	0 \$0	29 \$83,087
50-54	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$72,432	7 \$82,043	12 \$90,011	0 \$0	0 \$0	20 \$86,343
55-59	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$87,833	3 \$107,845	2 \$113,570	1 \$82,112	7 \$102,946
60-64	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
65 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	7 \$76,861	32 \$83,348	22 \$91,291	2 \$113,570	1 \$82,112	64 \$86,294

**Distribution of Active Members by Age and by Years of Service (Police I and Fire I)  
As of July 1, 2011**

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
25-29	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
30-34	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
35-39	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
40-44	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$77,921	5 \$86,409	0 \$0	0 \$0	0 \$0	8 \$83,226
45-49	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	3 \$77,278	19 \$82,787	7 \$86,390	0 \$0	0 \$0	29 \$83,087
50-54	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$72,432	7 \$82,043	12 \$90,011	0 \$0	0 \$0	20 \$86,343
55-59	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$87,833	3 \$107,845	2 \$113,570	1 \$82,112	7 \$102,946
60-64	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
65 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$81,877	1 \$81,877
Total	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	7 \$76,861	32 \$83,348	22 \$91,291	2 \$113,570	2 \$81,995	65 \$86,226

### History of Investment Return Rates

Year Ending June 30 of	Market
(1)	(2)
2000	20.61%
2001	-18.81%
2002	-6.79%
2003	3.40%
2004	16.63%
2005	9.25%
2006	8.24%
2007	14.79%
2008	-4.12%
2009	-16.88%
2010	14.27%
2011	22.30%
Average Returns:	
Last 5 Years	5.04%
Last 10 Years	5.45%

### **Actuarial Methods and Assumptions**

**Actuarial Cost Method:**

*Entry Age Normal actuarial cost method:* Under this method, the normal cost is the amount calculated as the level percentage of pay necessary to fully fund each active member's prospective benefit from entry age to retirement age. The total actuarial accrued liability, which is redetermined for each individual member as of each valuation date, represents the theoretical accumulation of all prior years' normal costs for the active members as if the present plan had always been in effect, plus the liability for any retirees, beneficiaries, or inactive members. The unfunded actuarial accrued liability represents the excess of the total actuarial accrued liability over the valuation assets.

**Asset Valuation Method:**

Assets used for the purpose of determining the contribution are equal to the fair market value of assets, adjusted to recognize the difference between actual investment return and expected return over a five year period at 20% per year. Actual return is net of administrative and investment expenses. Expected return is determined based on the assumed investment return rate and the market value of assets, adjusted for contributions received and benefits and refunds paid during the year.

**Actuarial Assumptions:**

- 1. Interest** 7.50% per year, net of investment and administrative expenses.
- 2. Salary Increases** The sum of (i) a 4.25% wage inflation assumption (composed of a 2.75% price inflation assumption and a 1.50% additional general increase), and (ii) a service-related component as shown below:

Police/Fire Employees		
Years of Service	Service-Related Component	Total Increase
0	10.00%	14.25%
1	9.00	13.25
2	6.00	10.25
3	3.00	7.25
4	2.50	6.75
5	2.00	6.25
6	0.50	4.75
7	0.50	4.75
8	0.25	4.50
9	0.25	4.50
10 or more	0.00	4.25

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period year following the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption. For employees with less than one year of service, the reported rate of pay is used rather than the fiscal year salary paid.

### 3. *Mortality*

#### A. Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: 115% of the RP-2000 Combined Healthy for Males with White Collar adjustments, projected with Scale AA.
- b. Female employees: 95% of the RP-2000 Combined Healthy for Females with White Collar adjustments, projected with Scale AA.
- c. Disabled males – 60% of the PBGC Table Va for disabled males eligible for Social Security disability benefits.
- d. Disabled females – 60% of the PBGC Table VIa for disabled females eligible for Social Security disability benefits.

#### B. Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: 75% of RP-2000 Combined Healthy for Males with White Collar adjustments.
- b. Female employees: 75% of RP-2000 Combined Healthy for Females with White Collar adjustments.

Sample rates are shown below:

Number of Deaths per 100		
Age	Males	Females
25	0.03	0.02
30	0.03	0.02
35	0.04	0.03
40	0.07	0.05
45	0.10	0.08
50	0.15	0.12
55	0.25	0.19
60	0.42	0.35
65	0.83	0.65
70	1.45	1.14

**4. Disability**

Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for retirement.

Age	Number of Disabilities per 1,000	
	Ordinary, Males and Females	Accidental, Males and Females
25	0.43	2.55
30	0.55	3.30
35	0.73	4.35
40	1.10	6.60
45	1.80	10.80
50	3.03	18.15
55	3.03	18.15
60	3.03	18.15
65	3.03	18.15

**5 . Termination:**

Termination rates (for causes other than death, disability, or retirement) are a function of the member's service. Termination rates are not applied to members eligible for retirement. Rates are shown below:

Service	Termination Rate	Service	Termination Rate
0	0.1000	10	0.0191
1	0.0528	11	0.0166
2	0.0481	12	0.0143
3	0.0436	13	0.0123
4	0.0394	14	0.0105
5	0.0354	15	0.0090
6	0.0316	16	0.0077
7	0.0281	17	0.0067
8	0.0249	18	0.0059
9	0.0219	20	0.0000



**6. Retirement Age**

Rates of retirement are based on an employee's length of service, as follows:

Fire II Members	
Service	Retirement Election
25	50.0%
26	16.0%
27	18.0%
28	20.0%
29	20.0%
30+	35.0%

**7. Benefit and Compensation Limits**

Benefit limits under Section 415 and compensation limits under Section 401(a)(17) of the Internal Revenue Code are assumed to have no impact on benefits earned under this plan.

**8. Marriage / Dependents**

95% of active employees are assumed to be married at retirement or death, with two children ages 11 and 13. Wives are assumed to be three years younger than their husbands. No remarriage is assumed.

**9. Service Purchase**

None assumed.

**10. Election of Fire II Program by Retiring Firefighters**

We assume members who retire with 28 or more years of service will elect the Fire II plan.

**11. Administrative and Investment Expenses**

None. The 7.50% investment return assumption represents the assumed return net of all investment and administrative expenses.

## Outline of Principal Plan Provisions

### A. FIREFIGHTERS

#### 1. *Effective Dates*

- a. Original Plan May 7, 1953.
- b. Most Recent Amendment July 23, 1996.

#### 2. *Eligibility*

All permanent members of the fire department hired prior to May 29, 1992.

#### 3. *Retirement*

- a. Eligibility Members who have completed 20 years of service may retire.
- b. Benefit Formula The annual benefit at retirement is equal to 50% of highest annual salary, plus 1% of salary for each year of service in excess of 20 (maximum 10). For pension purposes, annual salary includes regular, holiday, and longevity pay. Members may also select the benefit formula for the Firefighters II Pension Fund. The Firefighter II benefit formula is 50% of the final year's compensation, plus 2% for each year of service from 20 to 25 years, plus 3% for each year of service from 25 to 30 years with a fixed 3% compound cost of living adjustment.
- c. Commencement Date Retirement benefits commence as of the first payroll period after retirement.
- d. Form of Payment The annual benefit calculated in accordance with the formula in (b) above is payable semi-monthly for the remainder of the retired member's life, with 67.5% of the member's benefit payable for the lifetime of his surviving spouse.

**4. Vested Termination**

- |                      |  |
|----------------------|--|
| a. Eligibility       | Upon termination of employment after 10 years of service, a member is eligible for a benefit deferred to retirement age. |
| b. Benefit Formula   | 2.5% of highest annual salary multiplied by full years of service at termination.  |
| c. Commencement Date | 20th anniversary of employment.  |
| d. Form of Payment   | Same as retirement.  |

**5. Disability Retirement**

- |                      |   |
|----------------------|---|
| a. Eligibility       | A member who is unable to perform active duty as a result of disability which the Board of Public Safety finds to be permanently incapacitating is eligible to receive disability retirement benefits.  |
| b. Benefit Formula   | <u>Service-Related (and involving heart, lung, cancer or other Social Security disabilities).</u> $66\frac{2}{3}\%$ of highest annual salary, reduced for each dollar of earned income in excess of the salary the member would earn as an active employee, to a minimum of 50% of salary.<br><br><u>Other Service Related and Non-Service Related.</u> 50% of highest annual salary. |
| c. Commencement Date | Benefits commence as of the first payroll period after disability.  |
| d. Form of Payment   | Same as retirement.   |

**6. Non-vested Termination of Employment**

A member who leaves employment prior to completing 10 years of service will receive a lump sum payment of his accumulated contributions without interest.

**7. Death Before Retirement  
-- Survivor Annuity  
Benefits**

- |                                     |   |
|-------------------------------------|---|
| a. Eligibility                      | Death while actively employed.  |
| b. Benefit Formula                  |   |
| (1) Surviving Spouse                | <p><u>Service Related.</u> The annual benefit is 50% of the deceased member's highest annual salary, payable to the surviving spouse until death or earlier remarriage.</p> <p><u>Non-Service Related.</u> 30% of the deceased member's highest annual salary, payable to the surviving spouse until death or earlier remarriage.</p> |
| (2) Surviving Children              | 10% of the deceased member's highest annual salary, payable to each surviving child until his 18th birthday (or for life if such child is permanently disabled prior to the member's death).  |
| (3) Maximum Family<br>Death Benefit | <p><u>Service-Related.</u> 75% of deceased's highest annual salary.</p> <p><u>Non-Service Related.</u> 50% of deceased's highest annual salary.</p>   |
| c. Commencement Date                | Benefits commence as of the first payroll period after death.   |
| d. Form of Payment                  | Surviving spouse's and children's benefits are payable semi-monthly.  |

**8. Death Before Retirement  
-- Lump Sum Refund of  
Contributions**

A lump sum payment equal to the member's accumulated contributions without interest shall be paid to the estate of any active member who dies with no surviving spouse or children.

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|---|--|
| <b>9.    <i>Retiree Cost-of-Living Increases</i></b>          | All benefits in pay status are indexed in accordance with the base salary increases provided to active employees.  |
| <b>10.   <i>Service Purchase</i></b>                          | An active employee eligible to retire who has served in the U.S. armed forces may "purchase" additional years of service up to his number of years of military service, but no more than four years. A member may also purchase up to four years of prior civilian employment time with the City of Warwick. Either purchase would require the employee to contribute to the fund, at retirement, an amount which represents the actuarial equivalent value of the benefit increase purchased. |
| <b>11.   <i>Employee Contributions</i></b>                    | Active members contribute 7% of their covered earnings (regular, holiday, and longevity).  |
| <b>12.   <i>Optional Retirement Under Fire II Program</i></b> | Any firefighter retiring after July 23, 1996 may irrevocably elect to have his or her pension calculated under the City's Fire II program, including final year's compensation, a benefit multiplier increasing from 50% of pay after 20 years of service to 75% of pay after 30 years of service, and a fixed 3.0% annual cost-of-living increase.  |

## **B. POLICE I**

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|--|--|
| <b>1.    <i>Eligibility</i></b>            | Active and retired Police hired before February 1, 1971 are covered under this program.  |
| <b>2.    <i>Benefits</i></b>               | Benefits provided to remaining active police are in accordance with the proposed City's Code of Ordinances. Retirement, death, and disability benefits payable to retired members and beneficiaries are indexed in accordance with the base salary increases provided to active members of the police force. |
| <b>3.    <i>Employee Contributions</i></b> | Active members contribute 7% of their covered earnings (regular, holiday, and longevity).  |